REF 71C

Year XI December, 1937 No. 12

INTERNATIONAL INSTITUTE OF AGRICULTURE

IMPERIAL MYCOLOGICAL
17 DEC. 1937
INSTITUTE

INTERNATIONAL BULLETIN OF PLANT PROTECTION

PUBLISHED MONTHLY

REPRINT FROM THE 'INTERNATIONAL REVIEW OF AGRICULTURE'

ROME
VILLA UMBERTO I
1937

CONTENTS

DISCOVERIES AND CURRENT EVENTS:—

Brazil: Diseases of Cultivated or Useful Plants, Observed in the State of São Paulo 269

Eritrea: Locusts 275

The Netherlands: Organization of the Control of the Colorado Potato Beetle, *Leptinotarsa decemlineata* . . . 275

Italian Somaliland: Recent Observations. 276

LEGISLATIVE AND ADMINISTRATIVE MEASURES:—

Argentine Republic. 277

Colombia 277

United States of America . . 277

Italy 278

Kenya (Colony and Protectorate of) 278

Southern Rhodesia (Colony of) 279

Uruguay 279

Yugoslavia 279

RECENT BIBLIOGRAPHY 280

NOTES:—

'Cronica Botanica' 292

The reproduction either in whole or in part of material printed in this Bulletin is permitted but only on the express condition that the source is duly acknowledged as follows: *International Bulletin of Plant Protection* (*International Institute of Agriculture*).

ROME - PRINTING OFFICE OF THE CHAMBER OF DEPUTIES

The radio communiqués of the International Institute of Agriculture will be transmitted between 7.18 and 7.26 p. m. on the following days: Thursday, English; ***Friday,*** German; ***Saturday,*** Spanish; ***Tuesday,*** Italian; ***Wednesday,*** French.

They will be broadcast from Rome 1 (420.8 m.) and Rome 2 RO (25.4 m.).

The hour of broadcasts is in Central European Time, which is one hour ahead of Greenwich Mean Time, and 5 hours ahead of Eastern Standard Time in the United States.

INTERNATIONAL BULLETIN OF PLANT PROTECTION

1937 No. 12

DISCOVERIES AND CURRENT EVENTS *

Brazil: Diseases of Cultivated or Useful Plants, Observed in the State of São Paulo †

In the following list (first part) are given the diseases of cultivated or useful plants, studied at the Laboratory of Plant Pathology of the Institute of Biology, São Paulo, from 1931 to 1936.

The recognition of the parasites and diseases here enumerated was made by the author of the present communication and also by Messrs. Raul Drummond Gonçalves, João G. Carneiro and Spencer C. Arruda, assistants in the aforesaid Institute.

PINEAPPLE	
	Ceratostomella paradoxa (Fr.) Wint.
	Phytophthora sp.
GROUNDNUT	
	Cercospora personata (E. and C.) Ell.
ARTICHOKE	
	Ramularia cynarae Sacc.
AVOCADO PEAR	
	Sphaceloma perseae Jenk.
	Oidium perseae Noack.
	Colletotrichum gloeosporioides Penz.
	Hendersonia sp.
	Diplodia natalensis Ev.
	Acrostalagmus cinnabarinus Corda.
	Pestalozzia sp.
Eruptive pustule of the fruit	Cause unknown.
Mosaic	Virus ?
Necrosis of the limb	Virus ?
Sooty mold	*Stomiopeltis* sp.
Lenticellosis of the fruit	Physiological cause.

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from the official correspondent of the Institute, Mr. AGESILAU A. BITANCOURT, Assistant, Director of the Institute of Biology, Ministry of Agriculture, Industry and Commerce, São Paulo, Brazil.

OATS	
	Puccinia graminis avenae Erickss. and Henn.
AZALEA	
	Exobasidium discoideum Ellis.
BANANA	
	Cordana musae (Zimm.) v. H.
	Helminthosporium torulosum (Syd.) Ash.
	Mycosphaerella musae Speg.
	Piricularia oryzae Br. and Cav.
	Cladosporium sp.
	Leptosphaeria musarum (Sacc.) Berl.
	Gloeosporium musarum C. and M.
	Stachylidium theobromae Turc.
	Acrostalagmus cinnabarinus Corda.
	Fusarium sp.
	Chaetothyrina musarum (Speg.) Theiss.
	Nigrospora sp.
	Polyporus sapurema A. Möller.
BEET	
	Cercospora beticola Sacc.
COFFEE	
	Rosellinia sp.
	Cercospora coffeicola B. and C.
	Omphalia flavida (Cooke) Maubl. and Rang.
	Colletotrichum gloeosporioides Penz.
	Diplodia natalensis Ev.
	Coniothyrium sp.
	Ramularia goeldiana Averna-Saccà.
SUGAR CANE	
Mosaic	Virus.
Sereh	Virus.
Streak disease	Virus.
	Colletotrichum falcatum Went.
	Leptosphaeria sacchari v. Br. de Haan.
	Cercosporina longipes Butl.
	Ceratostomella paradoxa (Fr.) Wint.
	Melanconium sacchari Massee.
CARROT	
	Rhizoctonia crocorum (Pers.) DC.

CHERRY	
	Cercospora cerasella Sacc.
CHESTNUT	
	Corticium koleroga (Cke.) v. H.
CHAYOTE	
	Leandria momordicae Rangel.
	Mycosphaerella citrullina (Smith) Gross.
OAK	
	Oidium quercinum Thüm.
CABBAGE	
	Peronospora parasitica (P.) Fr.
	Alternaria brassicae (B.) Sacc.
	A. herculea (Ell. and Mart.) Ell.
	Plasmodiophora brassicae Wor.
	Pseudomonas campestris (Pam.) E. F. S.
CAULIFLOWER	
	Plasmodiophora brassicae Wor.
	Pseudomonas campestris (Pam.) E. F. S.
LEMON, see also *CITRUS*	
	Ascochyta citri Penz.
	Elsinoe fawcetti Bitanc. and Jenk.
CITRUS, see also Lemon, Lime, Tangerine, Orange and Grape fruit.	
	Phytophthora spp.
Psorosis	Virus.
	Diaporthe citri Wolf.
Leprosis	Virus.
	Colletotrichum gloeosporioides Penz.
Foliocellosis	Physiological cause.
Oleocellosis	Physiological cause.
Splitting of the fruit	Physiological cause.
	Stomiopeltis citri Bitanc.
	Capnodium citri (Berl.) Desm.
	Cephaleuros mycoidea Karst.
	Septobasidium albidum Pat.
	Sept. lepidosaphis Couch.
	Penicillium digitatum Sacc.
	Pen. italicum Wehm.
	Oospora citri-aurantii Ferr.
	Diplodia natalensis Ev.
Brown spots of the fruit	Cause unknown.

QUINCE	
	Fabraea maculata (Lév.) Atk.
	Cercospora mali E. and E.
CUCUMBER	
	Pseudoperonospora cubensis (B. and C.) Rost.
COTTON	
	Glomerella gossypii (South.) Edg.
	Verticillium albo-atrum Reink. and Berth.
	Cerotelium desmium (Berk. and Br.) Arth.
	Bacterium malvacerum E. F. S.
	Ascochyta gossypii Syd.
	Cercospora gossypina Cke.
	Ramularia areola Atk.
	Nematospora gossypii Ash.
Mosaic	Virus.
CRYPTOMERIA	
	Pestalozzia funerea Desm.
CYCAS	
	Hormodendron cladosporioides Sacc.
DAHLIA	
	Cercospora grandissima Rangel.
DATE PALM	
	Graphiola phoenicis (Moug.) Poit.
MAPLE	
	Peziotrichum saccardianum Rangel.
FIG TREE	
	Cerotelium fici (Cast.) Arth.
	Phytophthora sp.
	Colletotrichum gloeosporioides Penz.
INDIAN FIG	
	Montagnella opuntiarum Speg.
STRAWBERRY	
	Mycosphaerella fragariae (Tul.) Lind.
	Dendrophoma obscurans (E. and E.) And.
FUCHSIA	
	Puccinia fuchsiae Syd. and Holw.

GOMBO	
	Oidium sp.
	Ascochyta abelmoschi Harter.
GUAVA	
	Puccinia psidii Wint.
	Colletotrichum gloeosporioides Penz.
POMEGRANATE	
	Cercospora punicae P. Henn.
FRENCH BEAN	
	Uromyces appendiculatus (Pers.) Fr.
	Erysiphe polygoni DC.
	Colletotrichum lindemuthianum (S. and M.) B. and C.
	Phaeoisariopsis griseola Sacc.
	Cercospora canescens E. and M.
	Macrophomina phaseoli (Maub.) Ash.
LIME BEAN	
	Ascochyta phaseolorum Sacc.
HORTENSIA	
	Oidium sp.
	Cercospora hydrangeae E. and E.
	Alternaria sp.
JASMIN	
	Cercospora sp.
LETTUCE	
	Septoria lactucae Pass.
SOUR LIME TREE, see also *CITRUS*	
	Gloeosporium limetticolum Claus.
	Colletotrichum gloeosporioides Penz.
	Elsinoe fawcetti Bitanc. and Jenk.
	Els. australis Bitanc. and Jenk.
Rotting of the style	Unknown cause.
RANGPUR LIME TREE, see also *CITRUS*	
	Elsinoe fawcetti Bitanc. and Jenk.
SWEET LIME TREE, see also *CITRUS*	
	Elsinoe australis Bitanc. and Jenk.
Xyloporosis	Physiological cause.

LUCERNE	
	Uromyces striatus Schroet.
	Pseudoplea briosiana Poll.
MAIZE	
	Physoderma zeae-maydis Shaw.
	Ustilago zeae (Beckm.) Ung.
	Puccinia sorghi Schw.
	Diplodia macrospora Earle.
	Dipl. zeae (Schw.) Lév.
TANGERINE, see also *CITRUS*	
	Ascochyta citri Penz.
Zonal chlorosis	Virus.
	Corticium salmonicolor B. and Br.
SATZUMA TANGERINE, see also *CITRUS*	
	Elsinoe fawcetti Bitanc. and Jenk.
MANGO	
	Colletotrichum gloeosporioides Penz.
	Oidium sp.
	Leptosphaeria sp.
	Cephaleuros mycoidea Karst.
CASSAVA	
	Oidium sp.
	Cercospora henningsii Allesch.
MULBERRY	
	Cylindrosporium mori Berl.
	Bacterium mori Boy. and Lamb.
CARNATION	
	Uromyces caryophyllinus (Sch.) Wint.
	Heterosporium echinulatum (B.) Cke.
	Alternaria dianthi S. and H.
ONION	
	Bacillus carotovorus Jones
	Colletotrichum circinans (B.) Vogl.
	Macrosporium porri Ellis.
BITTER ORANGE, see also *CITRUS*	
	Elsinoe fawcetti Bitanc. and Jenk.
Chlorosis	Virus.
	Leptosphaeria bondari Bitanc. and Jenk.
	Ascochyta citri Penz.
	Septoria sp.

SWEET ORANGE, see also *CITRUS*	
	Corticium salmonicolor B. and Br.
Zonal chlorosis	Virus.
Exanthema	Physiological cause.
	Leptosphaeria bondari Bitanc. and Jenk.
	Ascochyta citri Penz.
	Mycosphaerella loefgreni Noack.
Collapse of the mesophyll	Physiological causes
	Elsinoe australis Bitanc. and Jenk.
WILLOW	
	Cercospora salicina Ell. and Ev.
GRAPEFRUIT, see also *CITRUS*	
	Elsinoe fawcetti Bitanc. and Jenk.
Zonal chlorosis	Virus.
	Leptosphaeria bondari Bitanc. and Jenk.
	Cercospora aurantii Heald and Wolf.

Eritrea: Locusts *

No locusts were reported in the Colony during the month of September, 1937.

The Netherlands: Organization of the Control of the Colorado Potato Beetle, *Leptinotarsa decemlineata* †

As an invasion of the Netherlands by the Colorado beetle from Belgium was considered probable, a Service was organized for the purpose of giving all information on the life history of the insect and relative control measures, especially in the southern provinces: Limburg, North Brabant, and Zealand. This organization is under the direction of Mr. K. Onrust, Chief Technical Officer of the district, assisted by all the officers of the Phytopathological Service of the provinces.

A general distribution has been made of coloured plates on which are attached life-size models of the larva and the adult, as well as pamphlets also containing illustrations in colour. The plates and pamphlets have been sent to all staff members of the Services of agricultural information, agricultural and horticultural education, and also primary and secondary schools.

* Communication from Dr. LUIGI M. BOLOGNA, Acting Chief of the Agricultural Bureau of Eritrea, Asmara, transmitted to the Institute by the Government of the Colony.

† Communication from the State Phytopathological Service, Wageningen, official correspondent of the Institute.

The beetle is studied in all the schools, and as far as possible, the collection of the insect has been organized by utilizing the services of school children.

Detailed information has been given to all farmers and horticulturists and also to policemen and gendarmes.

During the winter, the problem of the Colorado beetle was of primary importance at all farmers' and horticulturists' meetings.

In 1937, the presence of the Colorado beetle was reported in three localities: Castenray, Baarlo and Bakel. These three foci are situated near the Belgian frontier, to the south-west of the Netherlands.

Each of these foci was caused by one adult. The foci were treated in accordance with the regulations established by the International Committee for the control of the Colorado beetle, and were completely destroyed. The larvae and adults were collected and destroyed. Plants growing in contaminated zones were destroyed and the soil sieved in order to remove all larvae, pupae and adults; the soil was subsequently sprayed with petroleum and benzine. All potato fields in the vicinity were repeatedly treated with lead arsenate.

Italian Somaliland: Recent Observations *

Observations made during the month of August, 1937.

BANANAS. — Attacks by nematodes causing root rot more extensive than in July. Attacks by *Aspidiotus destructor* less severe. Considerable damage caused by different cryptogams (chiefly *Gloeosporium*) to bananas during transport to Italy.

COTTON. — Reddening and curling due to physiological phenomena chiefly in consequence of strong winds. The capsules are beginning to open, many of which show signs of having been attacked by different moths mainly *Platyedra* and *Diparopsis*.

Numerous seeds are attacked by *Dysdercus* and *Oxycarenus*.

MAIZE. — Serious damage to kernels caused by various beetles (*Curculionidae* and *Nitidulidae*); considerable damage also effected by birds.

GROUNDNUT. — Very considerable damage brought about by *Cercospora personata* resulting in a loss of 70 per cent. in yield.

CASTOR OIL PLANT. — With the opening of the racemes the first caterpillars of *Argiroploce walbergiana* were found.

SESAME. — Occasional attacks of *Antigastra catalaunalis*.

* Communication from Dr. FERRANTE PÀVERI-FONTANA, Acting Chief of the Agricultural Bureau of Italian Somaliland, Mogadiscio.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Argentine Republic. — By Decree No. 108.835 of 21 June, 1937, the 'Instituto de Investigaciones sobre la Langosta' is established, which Institute shall be under the control of the 'Dirección de Sanidad Vegetal' of the Ministry of Agriculture, and shall deal with all questions regarding the scientific study of the biology of the South American locust (*Schistocerca paranensis*), control measures and possible industrial utilization.

The duties of the Institute will consist in:—

(*a*) Drawing up the programme of research work and operations to be executed each year.

(*b*) Cooperating with national and provincial organizations and private associations engaged in similar work, for the realization of studies and research connected with its scientific activities.

(*c*) Preparing, with the approval of the Ministry of Agriculture, the reports and proposals to be presented at the international meetings, assisting towards the execution of the resolutions ratified and approved by the National Government.

(*d*) Corresponding with similar organizations abroad, exchanging data and information on different studies and research work, and proposing periodically to the Ministry of Agriculture the publication of information received, prepared or compiled.

(*e*) Presenting the Ministry of Agriculture each year with a memorandum giving details on the research work and operations carried out.

The aforesaid Institute shall be established at the José C. Paz Plant Quarantine Station, and the sum of forty thousand 'pesos' is assigned towards its installation and organization. (*Boletín Oficial de la República Argentina*, Buenos Aires, 23 de septiembre de 1937, año XLV, núm. 12.959, págs. 11717-11718).

Colombia. — By Decree No. 893 of 29 April, 1937, the Ministry of Agriculture and Commerce may refuse permission for the import of planting material authorized by Article 6 of Decree No. 1128 of 30 June, 1931 [see this *Bulletin*, 1931, No. 11, p. 207], when, in the opinion of the Chief of the 'Sanidad Vegetal' of the Department of Agriculture, import or transit in certain regions is considered inadvisable owing to the condition of the material and the possibility of danger being caused to existing crops. (*Diario Oficial*, Bogotá, 10 de julio de 1937, año LXXIII, núm. 23525, pág. 70).

United States of America. — Amendment No. 1 to the rules and regulations (fifteenth revision) supplemental to Notice of Quarantine No. 48, on account of the Japanese beetle [*Popillia japonica*], provides revision of regulations 5 and 10 concerning restrictions on the movement of fruits and vegetables, and general conditions governing inspection and issuance of certificates and permits, respectively.

The said amendement was approved and became effective on and after 10 May, 1937. (*B. E. P. Q. — Q. 48*, [Washington], 1937, 3 pp.).

Italy. — By Ministerial Decree of 7 July, 1937, the Provincial Syndicate of Fruit Cultivation at Forlì, is commissioned with the organization and supervision of the control measures to be applied to the oriental fruit moth (*Cydia* [*Laspeyresia*] *molesta*) and to be carried out at the expense of the holders of peach orchards in the communes of the Forlì Province.

The aforesaid Syndicate is also charged with the execution of the control measures at the expense of those persons not complying with the regulations or delaying in carrying out the operations. (*Bolletino ufficiale del Ministero dell'Agricoltura e delle Foreste*, Roma, 16 agosto 1937, anno IX, n. 16, pp. 1369-1370).

*** By Ministerial Decree of 19 July, 1937, in the province of Trieste the control of the oriental fruit moth (*C.* [*L.*] *molesta*) is rendered compulsory, this control to be carried out chiefly by collecting the infested shoots, the butts remaining after pruning and fruits, and by means of other methods which will be indicated by the Royal Phytopathogical Observatories.

The Royal Phytopathological Observatory, Trieste, will indicate the technical methods to be followed in the execution of control measures and will superintend their application, assisted in this respect by the provincial Commissioner for plant diseases.

The Provincial Syndicate of Fruit Cultivation, Trieste is charged with the organization and supervision of the control measures to be carried out at the expense of the holders of peach orchards in the communes of the province of Trieste. This same Syndicate is also commissioned with the execution of control measures at the expense of those persons not complying with the regulations or delaying in carrying out the operations. (*Ibid.*, pp. 1370-1372).

*** By Ministerial Decree of 20 July, 1937, the territories of the communes of Montevarchi and Bucine, Arezzo Province, have been declared infested with grape phylloxera. (*Ibid.*, p. 1372).

*** By Ministerial Decree of 26 July, 1937, the territory of the commune of Vallo di Lucania, Province of Salerno, has been declared infested with grape phylloxera. (*Ibid.*).

*** By Ministerial Decree of 30 September, 1937, the import of citrus plants into the province of Palermo is prohibited.

However, import is authorized into the said province of citrus plants purchased, through the intermediary of the Provincial Syndicate for citrus cultivation in Palermo, from nurseries situated in other provinces of Sicily and recognized as being free from 'mal secco' disease [*Deuterophoma tracheiphila*]. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 5 novembre 1937, anno 78°, n. 256, pp. 3999-4000).

Kenya (Colony and Protectorate of). — By Government Notice No. 356 of 16 April, 1937, the importation into the Colony of any rooting medium for plants which consists either wholly or in part of soil, whether or not it is attached to any plant, is prohibited. (*Supplement to the Official Gazette. Proclamations, Rules and Regulations* (*No. 15*). *Supplement No. 17*, Nairobi, April 27, 1937, Vol. XXXIX, No. 19, p. 145).

Southern Rhodesia (Colony of). — The Act No. 5, 1937, promulgated on 9 April, 1937 provides for the prevention of the spread of cotton pests by prohibiting the practices of ratooning cotton plants and of allowing cotton plants to remain in the ground from one growing season to another.

This Act may be cited for all purposes as the ' Cotton Pest Prevention Act, 1937 '. (*Colony of Southern Rhodesia Governement Gazette*, Salisbury, April 9, 1937, Vol. XV, No. 14, pp. 1-2).

Uruguay. — By Decree No. 960/937 of 26 July, 1937, the regulations relative to the sanitary condition of fruits are modified and the following parasites are declared pests to national agriculture:— *Laspeyresia molesta, Aspidiotus hederæ, Mesolecanium deltae, Lecanium perinflatum, Aleurothrixus floccosus, Margarodes vitium, Sporotrichum citri, Phytophthora parasitica, Ascospora beijerinckii, Exoascus deformans, Plasmopara viticola, Gloeosporium ampelophagum, Venturia pirina, V. inaequalis* and *Uncinula necator.*

The circulation, transit and trade within national territory of plants, fruits or green parts of plants infested with one of the aforesaid ' pests to agriculture ', are prohibited.

This measure shall be enforced immediately for all citrus and pomaceous fruits and shall be extended to other fruit species by resolution of the Ministry of Animal Husbandry and Agriculture, by request of the Department of Agronomy.

Every consignment of fresh fruit transported from the production centres to markets within republican territory, must be accompanied by a health certificate authorizing transport and issued by the competent authorities.

Orchards where the presence of the above-mentioned pests is reported, shall be declared ' isolated '.

This system of isolation shall be strictly applied beginning from 1 July, 1939.

From the date of this Decree up to 1 July, 1939, in orchards where the presence of these pests is reported, the fruit may only be placed on sale if complying with the following regulations:— up to 1 July, 1938, when it is estimated that 50 % of the fruits produced are free from disease; up to 1 July, 1939, when it is estimated that 70 % of the fruits produced are free from disease. From 1 July, 1939, onwards only a maximum of 5 % diseased fruit will be allowed.

In orchards declared ' isolated ', no fruit may be taken outside the estate, and the Department of Agronomy shall be pleased to answer any inquiries on the said estate, or shall issue publications if considered necessary. (*Diario Oficial de la República Oriental del Uruguay*, Montevideo, 10 de agosto de 1937, tomo 128, núm. 9285, págs. 262-A y 263-A).

Yugoslavia. — A Notification of the Minister of Agriculture, dated 28 January, 1937, gives a list of the countries considered for 1937 as being contaminated by potato wart disease (*Synchytrium endobioticum*), the Colorado beetle (*Leptinotarsa decemlineata*), the potato moth (*Phthorimaea operculella*) and the San José scale (*Aspidiotus perniciosus*). (*Deutsches Handel-Archiv*, Berlin, 15. Juli 1937, 91. Jahrg., S. 2492).

RECENT BIBLIOGRAPHY

ACREE, Ruby J., and GOSS, Warren H. A microchemical colorimetric pH procedure for differentiating the telia of Cronartium ribicola and C. occidentale. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 5, pp. 347-352.

ALLEN, Merle W., and PAINTER, Reginald H. Observations on the biology of the wheat-stem maggot in Kansas. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 3, pp. 215-238, figs. 1-5. Literature cited, pp. 237-238.
[*Meromyza americana*].

ALVARADO, Juan Antonio. Enfermedades de los semilleros y almácigas de café. *Revista Agrícola*, Guatemala, 1937, vol. XIV, núm. 9, págs. 470 a 472.
[*Stilbum flavidum, Corticium koleroga, Cercospora coffeicola, Colletotrichum coffeanum, Glomerella coffeicola*].

ARTHUR, J. C., and CUMMINS, George B. Philippine rusts in the Clemens collection, 1923-1926, II. *The Philippine Journal of Science*, Manila, 1936, Vol. 61, No. 4, pp. 463-488, pls. 1-4.

AUSTIN, M. D. Investigations on the insect and allied pests of cultivated mushrooms – XI. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 115-118, figs. 1-3. References, p. 118.
[*Linopodes antennaepes*].

AUSTIN, M. D., and PITCHER, R. S. Investigations on the insect and allied pests of cultivated mushrooms – X. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, p. 98. Reference.
[*Sciara varians*].

BALDACCI, Elio. Ricerche ed esperienze sulle malattie del riso (*Oryza sativa* L.). II. Il "brusone" non parassitario del riso. *Atti dell'Istituto Botanico dell'Università di Pavia*, Pavia, 1937, ser. IV, vol. X, pp. 3-30, figg. 1-21. Letteratura citata, pp. 28-30.
[With summaries in Italian, Latin and English].

BALDACCI, Elio. Ricerche intorno ad una infezione del *Ricinus communis* attribuita a *Fusarium ricini* (Bérenger) Bizz. *Atti dell'Istituto Botanico dell'Università di Pavia*, Pavia, 1937, ser. IV, vol. X, pp. 37-49, fig. 1. Bibliografia, p. 49.
[With summaries in Italian, Latin and English].

BALDACCI, Elio. Un nuovo genere di micete parassita del pioppo, *Pollaccia radiosa* (Lib.) Baldacci e Ciferri. Revisione dei g. *Stigmella* e *Stigmina*. *Atti dell'Istituto Botanico dell'Università di Pavia*, Pavia, 1937, ser. IV, vol. X, pp. 55-74, figg. 1-5.
[With summaries in Italian, Latin, and English. — *Fusicladium radiosum* = *Pollaccia radiosa*].

BARTH. Das Auftreten zweier Speckkäferarten (*Dermestes vulpinus* Fbr. und *peruvianus* Lap.) als Kakaoschädlinge. *Anzeiger für Schädlingskunde*, Berlin 1937, XIII. Jahrg., Heft 4, S. 56. Schrifttum.

BENATAR, Rubens. Sobre una nova mancha em epicarpo de "Citrus sinensis" Osbeck causada pelo Phoma Puttemansi n. sp. *Rodriguésia*, Rio de Janeiro, 1937, anno II, nº 7, pags. 306-313, figs. 1-6. Litteratura citada, pags. 312-313.
[The Latin diagnosis of the new species is appended].

BIRMINGHAM, W. A. soft or deep scald of apples. *The Agricultural Gazette of New South Wales*, Sydney, 1937, Vol. XLVIII, Pt. 7, pp. 397 and 406, figs. 1-2. [A non-parasitic trouble].

BORZINI, G[iovanni]. Sul comportamento di alcune varietà di peri inoculate con lo "Stereum purpureum". Pers. *Bollettino della R. Stazione di Patologia vegetale*, Roma, 1937, anno XVII, n. ser., n. 2, pp. 201-205, figg. 1-2.

BORZINI, G[iovanni]. Su di un attacco di "Sclerotinia libertiana" Fuck. in piante di finocchio e sul parassitismo della stessa in associazione con altri funghi. *Bollettino della R. Stazione di Patologia vegetale*, Roma, 1937, anno XVII, n. ser., n. 2, pp. 225-266, figg. 1-14. Note bibliografiche, pp. 264-266.
[*Sclerotinia libertiana*, associated with two indetermined species of *Pythium* as well as with *Phytophthora parasitica* and *Phyt. citrophthora* on *Foeniculum vulgare*].

BOVEY, Paul. Recherches sur le carpocapse des prunes, *Laspeyresia* (*Grapholitha*) *funebrana*, Tr. *Revue de Pathologie végétale et d'Entomologie agricole de France*, Paris, 1937, tome XXIV, nos 3-4, p. 189-317, fig. 1-59, pl. I-IX. Bibliographie, p. 311-315.

BOWMAN, D. H., MARTIN, J. H., MELCHERS, L. E., and PARKER, John H. Inheritance of resistance to Pythium root rot in sorghum. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 2, pp. 105-115, figs. 1-4.
[*Pythium arrhenomanes*].

BRAUN, H. Kurze Anleitung zur Erkennung und Bekämpfung der wichtigsten Unkräuter. Berlin, Verlag von Paul Parey, 1937, 75 S., 70 Abb.

BROWN, H. P. Mushroom bed invaders. Their habits and the means of control. *The Agricultural Gazette of New South Wales*, Sydney, 1937, Vol. XLVIII, Pt. 8, pp. 436-439, figs. 1-6. References, p. 439.
[*Mycogone perniciosa*, *Verticillium* sp., *Monilia fimicola*, *Papulaspora byssina*, *Coprinus* sp., *Pseudobalsamia microspora*, *Clitocybe dealbata*, *Xylaria vaporaria*].

CALDWELL, Ralph M. Rhynchosporium scald of barley, rye, and other grasses. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 3, pp. 175-198, fig. 1-4, pls. 1-4. Literature cited, p. 198.
[*Rhynchosporium secalis* (Oud.) Davis, on barley, rye and other grasses; *Rhynch. orthosporum* n. sp. on *Dactylis glomerata*. The Latin diagnosis and a description in English are given of this latter species].

CALVINO, Mario. Per risanare i terreni invasi dai nematodi. *La Costa Azzurra Agricola Floreale*, Sanremo, 1937, anno XVII, n. 10, pp. 221-223, 1 fig.

CANDURA, G. S. Cause d'insuccessi nella lotta invernale contro le cocciniglie dei fruttiferi. Tre anni di sperimentazione nella Venezia Tridentina. *L'Italia Agricola*, Roma, 1937, anno 74, n. 10, pp. 727-736, figg. 1-3.
[*Diaspis leperii* and *Aspidiotus ostraeformis*].

CARTER, Walter. The toxic dose of mealy-bug wilt of pineapple. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 10, pp. 971-981.
[*Pseudococcus brevipes*].

CARTWRIGHT, K. T. St G. A reinvestigation into the cause of "brown oak", *Fistulina hepatica* (Huds.) Fr. *Transactions British Mycological Society*, London, 1937, Vol. XXI, Pts. I & II, pp. 68-83, figs. 1-6, pls. I-VII. References, p. 83.

CASALETTI ARANCIBIA, Carlos. La acción de las sales de cobre y del azufre en la vegetación. Caldo borgoñes-Caldo bordelés. *Boletín de Agricultura y Ganadería*, Córdoba, 1937, año XIII, mayo-junio de 1937, págs. 36 y 37.

CHAPMAN, H. D., VANSELOW, A. P., and LIEBIG, Jr., George F. The production of citrus mottle-leaf in controlled nutrient cultures. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 5, pp. 365-379, figs. 1-6. Literature cited, pp. 378-379.
[This disease is a manifestation of zinc deficiency].

CHEN, Fong Ge. Four new Coccids from Chekiang. *Entomology & Phytopathology*, Hangchow, Chekiang, China, 1937, Vol. V, No. 19. pp. 382-388, pls. I-III.
[*Matsucoccus sinensis* n. sp. on *Pinus* sp., *Euphilippia aquifoliae* n. sp. on *Osmanthus aquifolium*, *Pseudoulacaspis hwangyensis* n. sp. on an unknown tree, and *Lepidosaphes pinicolus* n. sp. on *Pinus* sp.].

CHERIAN, M. C., and ISRAEL, P. Studies on *Elasmus zehntneri*, Ferr., a parasite of the sugarcane white moth borer (*Scirpophaga*). *The Madras Agricultural Journal*, Coimbatore, 1937, Vol. XXV, No. 9, pp. 273-279.

CHERNYSHEV, P. Forecasting and regional distribution of warehouse pests. *Plant Protection*, Leningrad, 1937, No. 13, pp. 71-73.
[In Russian, with title also in English].

CHESTER, K. Starr. Serological studies of plant viruses. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 903-912. Literature cited, p. 912.

CHIESA MOLINARI, O. Tuberculosis del olivo (Bacterium Savastanoi, Smith). *Boletín de Agricultura y Ganadería*, Córdoba, 1937, año XIII, mayo-junio de 1937, págs. 2 a 4, figs. 1-3.

CHIN, Meng-hsiao. Biology of the bamboo Zygaenid, *Artona funeralis* Butler, in Hangchow. *Entomology & Phytopathology*, Hangchow, Chekiang, China, 1937, Vol. V, No. 17, pp. 336-345, 5 figs.
[In Chinese, with title and summary also in English].

CHRISTIE, J. R. Mermis subnigrescens, a nematode parasite of grasshoppers. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 5, pp. 353-364, figs. 1-6.
[The species of grasshoppers infested by *Mermis subnigrescens* are:— *Arphia sulphurea, Camnula pellucida, Chorthippus longicornis, Chortophaga viridifasciata, Conocephalus brevipennis, Encoptolophus sordidus, Melanoplus bivittatus, M. femur-rubrum, M. mexicanus, Orphulella pelidna, Romalea microptera*].

CHUGUNIN, J. Testing pyrethrum as a means of codling moth control. *Plant Protection*, Leningrad, 1937, No. 13, pp. 73-75.
[In Russian, with title also in English. — *Cydia pomonella*].

COOK, W. R. Ivimey, and COLLINS, W. B. A Pythium wilt of Primula caused by *Pythium spinosum*, Sawada. *Transactions British Mycological Society*, London, 1937, Vol. XXI, Pts. I & II, pp. 29-33, figs. 1-7. References, p. 33.

D'ANCONA, Cesare. L'azione del boro sulle piante. Cenni di ordine bibliografico e critico. *Annali di Tecnica Agraria*, Roma, 1937, anno X, fasc. IV-VI, pp. 228-247. Bibliografia, pp. 246-247.
[With title and summary also in Latin].

DA SILVEIRA GRILLO, Heitôr V. Relatorio sobre a murcha do algodoeiro, causada pelo "Fusarium vasinfectum" Atk. no Estado da Parahyba. *Rodriguésia*, Rio de Janeiro, 1937, anno II, nº 7, págs. 319-327, photogr. 1-8. Bibliographia, pag. 327.

DAVIES, Cornelius, and SMYTH-HOMEWOOD, G. R. B. Investigations on machinery used in spraying. Part IV. Nozzles. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 50-57, figs. 1-9. References, p. 57.

DAVIS, Luther D. The gumming of Phillips Cling peaches. *Hilgardia*, Berkeley, California, 1937, Vol. 11, No. 1, pp. 1-34, figs. 1-22. Literature cited, p. 34.
[A disease of probable physiological nature].

DE HAAN, Johan Theodoor. Untersuchungen über das Auftreten der Keimlings-Fusariose bei Gerste, Hafer, Mais und Reis. *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 3, S. 235-305, Abb. 1-28. Schriftenverzeichnis, S. 302-305.
[*Fusarium herbarum, F. culmorum, F. moniliforme*].

DESHPANDE, V. G. Important insect pests of sugarcane in the Bombay Presidency. *Current Science*, Bangalore, 1937, Vol. VI, No. 1, pp. 33-35.
[*Hieroglyphus banian* var. *elongata, Trionymus sacchari, Aleurolobus barodensis, Pyrilla aberrans, Termites* sp., *Phyllognathus dionysius, Emmalocera depressella, Chilo zonellus, Argyria sticticraspis, Procometis trochalx*].

DRAKE, C. J., and DECKER, G. C. The grasshopper situation in Iowa. *Journal of Economic Entomology*, Menasha, Wisconsin, 1937, Vol. 30, No. 4, pp. 618-621.
[*Melanoplus mexicanus, M. bivittatus, M. femur-rubrum, M. differentialis, Ageneotettix deorum, Orphulella speciosa, Dissosteira carolina, Hippiscus* spp., *Chortophaga viridifasciata, Schistocerca americana, S. lineata*].

FAHMY, Tewfik. Cotton diseases. *International Cotton Bulletin*, Manchester, 1937, Vol. XV, No. 59, pp. 396-401.
[The diseases that attack cotton in Egypt are the following: sore-shin (*Corticium vagum*), wilt (*Fusarium vasinfectum*), and angular leaf spot (*Bacterium malvacearum*)].

FAWCETT, H. S., GRILLO, H. V. S., BITANCOURT, A. A., e MÜLLER, A. S. Relatorio sobre as doenças dos Citrus no Districto Federal, Estado do Rio de Janeiro e Minas Geraes. *Rodriguésia*, Rio de Janeiro, 1937, anno II, nº 7, págs. 329-334.

FRANCO, Alcides, e FERREIRA, Castaño. A podridão peduncular das laranjas. Estudo estatistico sobre o emprego do borax e da tesoura. *Rodriguésia*, Rio de Janeiro, 1937, anno II, nº 7, pags. 295-300.

FRANSSEN, C. J. H. Biologie en bestrijding van een drietal schadelijke fruitvliegen. *Landbouw*, Buitenzorg 1937, XIII jaarg., no 5, blz. 221-238, fig. 1-11. Literatuur, blz. 236-237.
[In Dutch, with title and summary also in English:— 'Biology and control of three noxious fruit flies in Java'. — *Dacus ferrugineus, D. umbrosus, D. cucurbitae*].

FRAPPA, C[laude]. Les plantes à roténone. Gouvernement général de Madagascar et Dépendances. *Bulletin Economique*, Tananarive, 1937, nouv. sér., nº 9, p. 61-71. Bibliographie, p. 70-71.

FRAPPA, C[laude]. Le sphinx des feuilles du caféier à Madagascar. Gouvernement général de Madagascar et Dépendances. *Bulletin Economique*, Tananarive, 1937, nouv. sér., nº 9, p. 72-74. Bibliographie, p. 74.
[*Cephonodes hylas*].

FRAPPA, Cl[aude]. Le sphinx des feuilles du caféier à Madagascar. *Revue de Pathologie végétale et d'Entomologie agricole de France*, Paris, 1937, tome XXIV, nos 3-4, p. 318-323. Bibliographie, p. 323.
[*Cephonodes hylas*].

FRON, G. Nouvelles observations sur la maladie du piétin des céréales (campagne 1937). *Comptes rendus hebdomadaires des séances de l'Académie d'Agriculture de France*, Paris 1937, tome XXIII, nº 25, p. 792-800, 1 fig.
[*Cercosporella herpotrichoides*].

GABOTTO, L[uigi]. La campagna peronosporica di quest'anno. *Il Coltivatore e Giornale Vinicolo Italiano*, Casale Monf., 1937, anno 83° e 63°, n. 19, pp. 381-383.
[*Plasmopara viticola*].

GADD, C. H. Compost and disease. *The Tea Quarterly*, St. Coombs, Talawakelle, 1937, Vol. X, Pt. II, pp. 93-100. References, p. 100.

GERBALDI, Costanzo. Ricerche ed opinioni sulla soluzione del problema della moria dell'olmo. *La Romagna Agricola e Zootecnica*, Ravenna, 1937, anno XXXI, n. 20, pp. 2-3.
[After having summarized the results obtained in recent experimental work in Italy on the elm disease (*Graphium ulmi*), the A. points out the advantages of artificial props (especially cement poles) as supports for the grape vine, in substitution of elm trees, which have died as a result of the disease; such artificial props have only one serious disadvantage, and that is, their cost].

GHILAROV, M. Factors determining injuriousness of the soil pests and their significance for the cultivation of the rubber-bearing plants. *Plant Protection*, Leningrad, 1937, No. 13, pp. 41-53. [Literature], pp. 51-52.
[In Russian, with title and summary also in English. — *Agriotes sputator*, *A. gurgistanus*, *Selatosomus latus*, *Opatrum sabulosum*, *Omophlus* spp., *Podonta daghestanica*, *Anisoplia austriaca*, *A. segetum*, *Pentodon idiota*, *Amphimallus solstitialis* injurious to *Taraxacum kok-saghyz* and *Scorzonera tau-saghyz*].

GHILAROV, M. S. Root aphids and ants affecting rubber-producing plants. *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 479-482, fig. 1. References, p. 482.

GIGANTE, R[oberto]. Ricerche istologiche sulle omeoplasie crestiformi (enations) delle foglie di vite affette da rachitismo. *Bollettino della R. Stazione di Patologia vegetale*, Roma, 1937, anno XVII, n. ser., n. 2, pp. 169-192, figg. 1-14, tav. IV. Bibliografia, pp. 190-191.

GOIDÀNICH, G[abriele]. Notizie su una malattia della vite poco conosciuta. *Rendiconti della R. Accademia Nazionale dei Lincei*, Classe di Scienze fisiche, matematiche e naturali, Roma, 1937, vol. XXVI, ser. 6ª, 2° sem., fasc. 3-4, pp. 107-112, figg. 1-3.
[*Phomopsis viticola* (Redd.) G. Goid. n. comb. near Trieste].

GOIDÀNICH, Gabriele. Sulle specie di "Alternaria" che producono il "nerume" del cavolfiore in Italia. *Bollettino della R. Stazione di Patologia vegetale*, Roma, 1937, anno XVII, n. ser., n. 2, pp. 193-200, fig. 1.
[*Alternaria brassicae* (Berk.) Bolle and *A. circinans* (Berk. et Curt.) Bolle].

GOIDÀNICH, Gabriele. I più recenti risultati degli studi e i nuovi indirizzi delle ricerche sulla grafiosi dell'olmo in Italia e all'estero. *Bollettino della R. Stazione di Patologia vegetale*, Roma, 1937, anno XVII, n. ser., n. 2, pp. 206-224.
[*Graphium ulmi*].

GÓMEZ-MENOR [O.], Juan. Instrucciones para reprimir la enfermedad "Panama" en los plátanos, guineos y rulos. *Revista de Agricultura*, Ciudad Trujillo, República Dominicana, 1937, vol. XXVIII, núm. 93, pág. 276.
[*Fusarium cubense*].

GÓMEZ-MENOR O., Juan. Instrucciones generales para combatir las principales plagas de orugas (gusanos) que atacan al arroz y la yuca. *Revista de Agricultura*, Ciudad Trujillo, República Dominicana, 1937, vol. XXVIII, núm. 94, pág. 366.
[*Laphygma frugiperda*, *Dilophonota ello*].

GOODWIN, W., PIZER, N. H., SALMON, E. S., and WARE, W. M. The control of apple scab: Allington Pippin and Newton Wonder, 1936. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40. pp. 9-17.
[*Venturia inaequalis*].

GREEN, E. L., and GOLDSWORTHY, M. C. The copper content of residues from sprays containing adjuvants. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 10, pp. 957-970. Literature cited, p. 970.

GREIG, J. L. The use of chemicals for the eradication of lalang grass. *The Malayan Agricultural Journal*, Kuala Lumpur, 1937, Vol. XXV, No. 9, pp. 363-369, 1 pl. Bibliography, p. 369.
[*Imperata arundinacea*].

GRIVANOV, K. On the number of generations of Euxoa segetum Schiff. in the southern wooded-steppe of the Ukraine. *Plant Protection*, Leningrad, 1937, No. 13, pp. 56-59. [Literature], p. 59.
[In Russian, with title also in English].

GRODSINSKY, León. Manifestación foliar del Ustilago tritici. *Revista Argentina de Agronomía*, Buenos Aires, 1937, tomo 4, nº 1, págs. 71 y 72, 1 fig.

GUERRERO Y CARVAJAL, Fco. Enfermedades que atacan al tabaco. *Revista de Agricultura*, Ciudad Trujillo, República Dominicana, 1937, vol. XXVIII, núm. 94, págs. 320 y 321.
[*Bacterium solanacearum*, *Fusarium* sp., *Phytophthora* sp., mosaic, etc.].

GUSSEV, V. Contribution to the ecology of bark-borers on the Caucasian Black Sea coast. *Plant Protection*, Leningrad, 1937, No. 13, pp. 60-68.
[In Russian, with title and summary also in English. — *Scolytidae*].

GUTIERREZ, Herminio P. Sunchillo o flor de sapo (*Wedelia glauca* Hoffm.). *Anales de la Sociedad Rural Argentina*, Buenos Aires, 1937, año LXXI, vol. LXXI, nº 7, págs. 517 a 519, 3 figs.
[A weed].

HARGREAVES, E. Some insects and their food-plants in Sierra Leone. *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 505-520.

HARLAND, Sydney Cross. A note on two larval parasites of the sugar-cane moth-borer in São Paulo, Brazil. *Scientific Agriculture*, Trinidad, B. W. I., 1937, Vol. XIV, No. 10, p. 280.
[*Metagonistylum minense* and *Paratheresia brasiliensis* as parasites of *Diatraea*].

HARRIS, W. Victor. Annotated list of insects injurious to native food crops in Tanganyika. *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 483-488.

HENDRICKX, Fred-L. Sur l'antagonisme existant entre une bactérie et l'agent [*Ophiostoma ulmi* (Schwarz) Nannfeldt] de la maladie de l'orme (*Ulmus* sp.). *Comptes rendus des séances de la Société de Biologie et de ses filiales et associées*, Paris, 1937, tome CXXVI, nº 24, p. 99-100.
[The bacterium in question resembles *Pseudomonas lignicola*].

HENSON, Lawrence, and WALLEAU, W. D. Sclerotium bataticola Taubenhaus, a common pathogen of red clover roots in Kentucky. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 913-918, figs. 1-2. Literature cited, pp. 917-918.

HILL, C. C., and EMERY, V. T. The biology of Platygaster herrickii, a parasite of the hessian fly. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 3, pp. 199-213, figs. 1-11. Literature cited, p. 213.
[*Platygaster herrickii*, a parasite of *Phytophaga destructor*].

HODSON, W. E. H. On the synonymy and biology of the strawberry aphis, *Capitophorus fragariae*, Theo. (1912). *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 409-416, pls. X-XI, References, p. 416.

HOROVITZ, S. Resistencia del maíz « amargo » al ataque por la langosta. *Revista Argentina de Agronomía*, Buenos Aires, 1937, tomo 4, nº 1, págs. 27 a 38. figs. 1-6.

JAMES, H. C. Sex ratios and the status of the male in Pseudococcinae (Hem. Coccidae). *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 429-461. References, p. 461.

JANNONE, Giuseppe. Importanza dell'organo copulatore maschile nella speciografia del gen. *Calliptamus* Serv. e ridescrizione del *C. okbaensis* Kheil (*Orth. Acrididae*) dell'Africa settentrionale. *Annali del Museo Civico di Storia Naturale di Genova*, Genova, 1937, vol. LIX, pp. 479-493, figg. I-V. Bibliografia, pp. 492-493.

JARY, S. G. Tests of insecticides against *Anthonomus rubi* (Herbst). *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 134-147. References, p. 147.

JARY, S. G., and AUSTIN, M. D. "Meta-fuel" and slug control. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 183-186. Reference.

JARY, S. G., MARTIN, J. T., and TATTERSFIELD, F. The artificial drying of pyrethrum flowers. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 108-114, 1 fig. References, p. 114.

JARY, S. G., and STAPLEY, J. H. Investigations on the insect and allied pests of cultivated mushrooms – IX. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 119-129, figs. 1-5. References, p. 124.
[*Tyrogiyphus dimidiatus* (*longior*)].

JOHNSON, James, and HOGGAN, Ismé A. The inactivation of the ordinary tobacco-mosaic virus by microorganisms. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 10, pp. 1014-1027, fig. 1. Literature cited, p. 1027.

JOHNSTON, John R. Los hongos "royas" en Guatemala. *Revista Agrícola*, Guatemala, 1937, vol. XIV, núm. 9, págs. 473 a 478.
[*Puccinia rubigo-vera*, *Uromyces phaseolorum*, *U. striatus*, *Tranzschelia punctata*: *Phragmidium disciflorum*].

KALINENKO, V. O. Immunity shifts in *kok-saghyz in vitro*. *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 3, S. 332-337, Fig. 1-5. List of references, S. 337.
[*Taraxacum kok-saghyz*].

KATZNELSON, H. Bacteriophage in relation to plant diseases. *The Botanical Review*, Lancaster, Pa., 1937, Vol. 3, No. 10, pp. 499-521. Bibliography, pp. 518-521.

KENT, G. C. Some physical, chemical, and biological properties of a specific bacteriophage of Pseudomonas tumefaciens. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 871-902. Literature cited, pp. 900-902.

KIENHOLZ, J. R. Isolating single spores without special equipment. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 950-951, fig. 1.

KOIDSUMI, Kiyoaki. Experimental studies on the influence of low temperatures upon the development of fruit-flies (8th Report). On the fatal action of low temperatures upon the pupae of *Chaetodacus ferrugineus* var. *dorsalis* Hendel. *Journal of the Society of Tropical Agriculture*, Taiwan (Formosa), Japan, 1937, Vol. IX, No. 1, pp. 54-59.
[In Japanese, with title also in English].

KOIDSUMI, Kiyoaki. Experimental studies on the influence of low temperatures upon the development of fruit-flies (9th Report). On the acclimation to low temperatures in the melon-fly pupae. *Journal of the Society of Tropical Agriculture*, Taiwan (Formosa), Japan, 1937, Vol. IX, No. 2, pp. 236-246.
[In Japanese, with title also in English].

KÖHLER, E. Ueber eine äusserst labile Linie des X – Mosaikvirus der Kartoffel. *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 5, S. 467-479, Abb. 1-6.

LEACH, J. G., ORR, L. W., and CHRISTENSEN, Clyde. Further studies on the interrelationship of insects and fungi in the deterioration of felled Norway pine logs. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 2, pp. 129-140, figs. 1-8.
[*Peniophora gigantea, Monochamus scutellatus, M. notatus, Chrysobothris dentipes, Chalcophora virginiensis* on *Pinus resinosa*].

LEITZKE, Benno. Infektionsversuche mit Haferflugbrand - Sporen - Gemischen. *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 5, S. 504-553, Abb. 1-4. Schriftenverzeichnis, S. 553.
[*Ustilago avenae*].

LEWIS, Esther A. Some fungous diseases of Clarkia elegans. *Phytopathology*. Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 951-953.

LIN, Shih-Cheng. An experimental study on the controlling of pear rust (Gymnosporangium Haraeanum Syd.) by spraying different fungicides. *Entomology & Phytopathology*, Hangchow, Chekiang, China, 1937, Vol. V, No. 19, pp. 391-396.
[In Chinese, with title also in English].

MACOLA, Tulio. Algunas indicaciones sobre modalidades y medios de lucha contra el "gusano del duraznero" (Laspeyresia molesta, Busck). *Boletín de Agricultura y Ganadería*, Córdoba, 1937, año XIII, mayo-junio de 1937, págs. 29 a 31, 1 fig.

MAGERSTEIN, Vincenz. Verzweigung der Weidenruten durch Insektenbefall. *Die kranke Pflanze*, Dresden 1937, 14. Jahrg., Heft 9, S. 150-152, Abb. 1-4.
[*Earias chlorana, Rhabdophaga rosaria*].

MALENOTTI, Ettore. Osservazioni sulle schiusure della piralide del mais. *Giornale di Agricoltura della Domenica*, Roma, 1937, anno XLVII, n. 43, p. 365, figg. 1-3.
[*Pyrausta nubilalis*].

MAMELI CALVINO, Eva. Heterodera marioni ospite di Lavandula vera. *La Costa Azzurra Agricola Floreale*, Sanremo, 1937, anno XVII, n. 10, pp. 227-228.

MAMELI CALVINO, Eva. Diffusione della Puccinia Antirrhini in Italia. *La Costa Azzurra Agricola Floreale*, Sanremo, 1937, anno XVII, n. 10, pp. 228-230, 2 figg.

MAMELI CALVINO, Eva. Il pericolo dell'invasione della Doryphora delle patate. *La Costa Azzurra Agricola Floreale*, Sanremo, 1937, anno XVII, n. 10, pp. 231-234, 1 fig.
[*Leptinotarsa decemlineata*].

MANEVAL, Willis E. A list of Missouri fungi with special reference to plant pathogens and wood-destroying species. *The University of Missouri Studies*, Columbia, Missouri, 1937, Vol. XII, No. 3, pp. 1-150. Bibliography, pp. 126-150.

MANIL, Paul, et GRATIA, André. Transmission du virus de la mosaïque du tabac à l'Orobanche, plante parasite dépourvue de chlorophylle. *Comptes rendus des séances de la Société de Biologie et de ses filiales et associées*, Paris, 1937, tome CXXVI, nº 24, p. 67-69.

MARSHALL, Guy A. K. New injurious Curculionidae (Col.). *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 467-477, fig. 1, pl. XII.
[*Blosyrus ipomoeae* n. sp. on sweet potatoes (South Rhodesia); *Analeurops cuthbertsoni* n. gen. et n. sp. on tobacco, cowpea and sunn hemp (S. Rhodesia);

Naupactus bondari n. sp. on cacao (Brazil); *Eremnus angustirostris* n. sp. on maize (Orange Free State); *E. angustirostris articollis* n. subsp. (Transvaal); *Promecopsis canavaliae* n. sp. on *Canavalia ensiformis* and *Erythrina* (Brazil); *Brachycerus citriperda* n. sp. on citrus (Natal); *Amorphoidea pectoralis* n. sp. on cotton (Java); *Conotrachelus licaniae* n. sp. on *Licania rigida* (Brazil); *Catagmatus clematidis* n. sp. on *Clematis* (Sumatra); *Ocladius dianthi* n. sp. on carnations (Union of South Africa); *Thegilis theobromae* n. sp. on cacao (Brasil). — Description in English].

MASSEE, A. M. An Eriophyid mite injurious to tomato. *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, p. 403.
[*Phyllocoptes lycopersici* n. sp. in Queensland and New Zealand. — Description in English].

MATKOVSKY, S. New achievements in the control of Bruchus pisorum L. *Plant Protection*, Leningrad, 1937, No. 13, pp. 83-86.
[In Russian, with title also in English].

MATSUMOTO, Takashi, and OKABE, Norio. Bacteriophage in relation to Bacterium solanacearum. II. Further studies on the phage and antiphagic serum. *Journal of the Society of Tropical Agriculture*, Taiwan (Formosa), Japan, 1937, Vol. IX, No. 2, pp. 205-213. Literature cited, p. 213.

MCLEAN, Ruth, WOLF, Frederick A., DARKIS, F. R., and GROSS, P. M. Control of downy mildew of tobacco by vapors of benzol and of other organic substances. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 10, pp. 982-991, figs. 1-3. Literature cited, p. 991.
[*Peronospora tabacina*].

MEADLY, G. R. W. Wild Verbena or purple top (*Verbena bonariensis* Linn.). *Journal of the Department of Agriculture of Western Australia*, Perth, 1937, Vol. 14 (Second Series), No. 2, pp. 130-131, 1 pl.

MIELKE, J. L., CHILDS, T. W., and LACHMUND, H. G. Susceptibility to Cronartium ribicola of the four principal Ribes species found within the commercial range of Pinus monticola. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 5, pp. 317-346, figs. 1-6. Literature cited, pp. 345-346.
[*Ribes petiolare, R. inerme, R. viscosissimum, R. lacustre*].

MILAN, A. La carie del grano sul Mentana. *Giornale di Agricoltura della Domenica*, Roma, 1937, anno XLVII, n. 43, p. 369.
[*Tilletia tritici, T. levis*].

MINISTRY OF AGRICULTURE, EGYPT. CROP PROTECTION SECTION. PLANT QUARANTINE SUB-SECTION. List of insect pests, fungus and other diseases prohibited entrance into Egypt. *Leaflet No.* 26, Cairo, 1937, 6 pp.

MOORE, Elizabeth Jane. Carbon and oxygen requirements of the cotton root-rot organism, Phymatotrichum omnivorum, in culture. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 918-930. Literature cited, p. 930.

MORGAN, E. T. The need for dipping seed potatoes for the control of Rhizoctonia. *Journal of the Department of Agriculture of Western Australia*, Perth, 1937, Vol. 14 (Second Series), No. 2, pp. 128-130. Reference, p. 130.

MORITZ, O. Neuere biochemische und serologische Arbeiten auf dem Gebiet der pflanzlichen Viruskrankheiten (Sammelreferat). *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 5, S. 554-558. Schriftenverzeichnis, S. 558.

MORQUER, R. Etudes biologiques sur les associations fongiques. Coexistence de champignons viticoles sur le même hôte. Hypocréacées. *Revue générale de Botanique*, Paris, 1937, tome XLIX, nº 585, p. 558-594, fig. 1-20; nº 586, p. 619-636, fig. 21-24. Bibliographie, p. 633-636.

MORRIS, K. R. S., CAMERON, E., and JEPSON, W. F. The insect parasites of the spruce sawfly (*Diprion polytomum*, Htg.) in Europe. *Bulletin of Entomological Research*, London, 1937, Vol. 28, Pt. 3, pp. 341-393, figs. 1-20. References, pp. 392-393.

NEWMAN, L. J. Grasshopper pest. Poison bait formula. *Journal of the Department of Agriculture of Western Australia*, Perth, 1937, Vol. 14 (Second Series), No. 2, p. 186.

ORIAN, G. Notes préliminaires sur une maladie du palmier à Maurice, causée par le *Bacterium vasculorum* (Cobb) Gr. Smith. *La Revue Agricole de l'Ile Maurice*, Maurice, 1937, nº 93, p. 100-101.
[*Bact. vasculorum* on *Dictyosperma album*].

ORIAN, G. Un nouvel hôte du *Bacterium vasculorum* (Cobb) Gr. Smith, à Maurice. *La Revue Agricole de l'Ile Maurice*, Maurice, 1937, nº 94, p. 130-131.
[*Thysanolaena maxima*].

ORTH, H. Untersuchungen über die Biologie und Bekämpfung des Erregers der Bakterienwelke der Tomaten (Bact. michiganense E. F. S.). *Zentralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten*, II. Abt., Jena 1937, 96. Bd., Nr. 20/23, S. 376-402, Abb. 1-9. Schriftenverzeichnis, S. 400-401.

ORTON, C. R., and HILL, L. M. An undescribed potato disease in West Virginia. *Journal of Agricultural Research*, Washington, D. C., 1937, Vol. 55, No. 2, pp. 153-157, pls. 1-6.
[The origin and etiology of this disease are unknown].

PARFENTYEV, V. Zeuzera pyrina L. in Kamyshin, Saratov region. *Plant Protection*, Leningrad, 1937, No. 13, pp. 76-80. [Literature], p. 80.
[In Russian, with title also in English].

PATAY, R. Sur la régénération des pattes chez le coléoptère chrysomélide *Leptinotarsa decemlineata* Say. *Comptes rendus des séances de la Société de Biologie et de ses filiales et associées*, Paris, 1937, tome CXXVI, nº 26, p. 283-285.

PITTMAN, H. A. Take-all and similar diseases of wheat and how to control them. *Journal of the Department of Agriculture of Western Australia*, Perth, 1937, Vol. 14 (Second Series), No. 2, pp. 103-112, figs. 1-4.
[*Ophiobolus graminis*, *Helminthosporium sativum*].

PUSTOVOYT, A. The control of Apion apricans Hbst. by means of ditches. *Plant Protection*, Leningrad, 1937, No. 13, pp. 80-83.
[In Russian, with title also in English].

QUINTANILLA, R. El escarabajo del pepino. *Revista de Agricultura*, Ciudad Trujillo, República Dominicana, 1937, vol. XXVIII, núm. 94, pág. 366.
[*Diabrotica vittata*].

RECKENDORFER, Paul. Die chemischen Grundlagen der Wirkungsweise der Schwefelkalkbrühe. *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 3, S. 306-331. Schriftenverzeichnis, S. 330-331.

REGNARD, P. Mission entomologique à Madagascar en 1936. *La Revue Agricole de l'Ile Maurice*, Maurice, 1937, nº 93, p. 93-96.
[For the study of the parasites of different insects injurious to crops in Mauritius].

ROLFE, Sholto W. Notes on Diplopoda IV. The recognition of some millipedes of economic importance. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 99-107, figs. 1-21. References, p. 107.
[*Polydesmus* spp., *Brachydesmus superus mosellanus*, *Paradesmus gracilis*, *Cylindroiulus* spp., *Tachypodoiulus niger*, *Ophyiulus pilosus*, *Blaniulus guttatus*, *Archiboreoiulus pallidus*, *Choneiulus palmatus*].

ROMBOUTS, João. Una molestia de "Eucalyptus" e de "Populus", na Bahia, causada por "Corticium salmonicolor" B. et Bred. *Rodriguésia*, Rio de Janeiro, 1937, anno II, nº 7, pags. 301-305, 2 figs. Literatura citada, pag. 305.

RUI, Dino. Relazione sul funzionamento degli Osservatori antiperonosporici della provincia di Treviso. Annata 1936. *Annuario della R. Stazione Sperimentale di Viticoltura e di Enologia di Conegliano*, Treviso, 1937, vol. VII (1936-1937), pp. 397-421, figg. 1-3.
[*Plasmopara viticola*].

SALMON, E. S., and WARE, W. M. The honey fungus (*Armillariella mellea*) attacking fruit trees and hops; with observations on *Pholiota squarrosa* in cherry orchards. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 18-26, figs. 1-6.

SALMON, E. S., and WARE, W. M. The downy mildew of the hop in 1936. *The Journal of the South-Eastern Agricultural College*, Wye, Kent, 1937, No. 40, pp. 27-36, figs. 1-2.
[*Pseudoperonospora humuli*].

SAMUEL, G., and GREANEY, F. J. Some observations on the occurrence of *Fusarium culmorum* on wheat. *Transactions British Mycological Society*, London, 1937, Vol. XXI, Pts. I & II, pp. 114-117. References, p. 117.

SANTINI, P. Contribution d'un médecin à l'étude du bayoudh, maladie du palmier-dattier. *Archives de l'Institut Pasteur d'Algérie*, Alger, 1937, tome XV, nº 2, p. 271-276, pl. XXI.
[*Fusarium albedinis* accompanied by *Thielaviopsis paradoxa*].

SAVAGE, C. G., and BROADFOOT, H. Internal cork of apples. Soil dressing of borax give excellent results. *The Agricultural Gazette of New South Wales*, Sydney, 1937, Vol. XLVIII, Pt. 7, pp. 387-390, figs. 1-4; references, p. 370; Pt. 8, pp. 447-452, figs. 5-12.

SAVELLI, M. Contro la "moria dell'olmo". Breve relazione sui mezzi di lotta sperimentati e sui risultati ottenuti. *Stazione Agraria "A. Mussolini" – Forlì. Attività dell'Istituto nel triennio 1934-1936*, Forlì, 1937, pp. 149-166, figg. 1-11.
[*Graphium ulmi*].

SAVELLI, M., [e] CARLONI, L. Trattamenti cuprici sulla bietola da zucchero. *Stazione Agraria "A. Mussolini" – Forlì. Attività dell'Istituto nel triennio 1934-1936*, Forlì, 1937, pp. 105-121.
[For the control of *Cercospora beticola*].

SCHULTZ, Helmut. Zur Biologie der *Bremia lactucae* Regel, des Erregers des Falschen Mehltaus des Salats. *Phytopathologische Zeitschrift*, Berlin 1937, Bd. X, Heft 5, S. 490-503, Abb. 1-10. Schriftenverzeichnis, S. 503.

SERDYUKOV, P. Results of widespread distribution of Aphelinus mali as a means of Eriosoma lanigerum control in the North Causasus. *Plant Protection*, Leningrad, 1937, No. 13, pp. 69-71.
[In Russian, with title also in English].

SHIBATA, Kikuo. Relation between lemon-fruit and damage of mango-fly (orange-fly), *Chaetodacus ferrugineus* var. *dorsalis* Hendel. *Journal of the Society of Tropical Agriculture*, Taiwan (Formosa), Japan, 1937, Vol. IX, No. 1, pp. 60-68, 2 figs.
[In Japanese, with title also in English].

SIBILIA, Cesare. Esperienze di lotta diretta contro le ruggini del grano con "Asporital" D'Amico nel 1937. *Bollettino della R. Stazione di Patologia vegetale*, Roma, 1937, anno XVII, n. ser., n. 2, pp. 267-272, 1 fig.
[It is shown by these experiments, that dusting carried out with the new preparation of signor A. D'Amico, called 'Asporital', prevents, even in the presence

of slight attacks of rust, practically all the losses caused by *Puccinia* spp. According to the A., further experiments are necessary to ascertain the action which 'Asporital' may have on the fungal flora of the soil. 'Asporital' is effective against weeds].

SINGH, B. N., and MATHUR, P. B. Negative correlation between the occurrence of polyphenol oxidase and diastase and the degree of incidence of "black-heart" of potato. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 10, pp. 992-1000. Literature cited, p. 1000.
[A physiological disease of potato tubers].

SMEE, C. Notes on the development of red locust hoppers (*Nomadacris septemfasciata*, Serv.) under natural climatic conditions. *Bulletin of Entomogical Research*, London, 1937, Vol. 28, Pt. 3, pp. 417-427, figs. 1-9. References, p. 427.

SPEYER, W. Erfahrungen bei der Schädlingsbekämpfung im Altländer Obstbau. *Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1937, 17. Jahrg., Nr. 11, S. 87-88.

SQUIRE, F. A. A theory of diapause in *Platyedra gossypiella* Saund. *Tropical Agriculture*, Trinidad, B. W. I., 1937, Vol. XIV, No. 10, pp. 299-301, figs. 1-2. References, p. 301.

STANLEY, W. M., [and] WYCKOFF, Ralph W. G. The isolation of tobacco ring spot and other virus proteins by ultracentrifugation. *Science*, Lancaster, Pa., 1937, New Series, Vol. 85, No. 2198, pp. 181-183.

STRAIB, W. Flughafer als Zwischenträger des Kronenrostes. *Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1937, 17. Jahrg., Nr. 11, S. 89.
[*Puccinia coronata*].

STROBEL, A., und Mitarbeitern. 35 Jahre Bayerische Landesanstalt für Pflanzenbau und Pflanzenschutz München. *Praktische Blätter für Pflanzenbau und Pflanzenschutz*, Freising 1937, XV. Jahrg., Heft 5/6, S. 113-[198], Abb. 1-14. Literatur-Übersicht, S. 187-197.

TAKAHASHI, Ryoichi. Some observations on the insect pests of agricultural plants in the mountainous regions in Formosa. 2. *Journal of the Society of Tropical Agriculture*, Taiwan (Formosa), Japan, 1937, Vol. IX, No. 1, pp. 69-78.
[In Japanese, with the title also in English].

THORNBERRY, H. H., and ANDERSON, H. W. Some bacterial diseases of plants in Illinois. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 9, pp. 946-949.
[*Phytomonas polygoni* n. sp. on *Polygonum convolvulus*; *Phyt. plantaginis* n. sp. on *Plantago lanceolata*; *Phyt. colurnae* n. sp. on *Corylus colurna*; *Phyt. cichorii* on *Cichorium intybus*; *Phyt. helianthi* var. *tuberosi* [sic] n. var. on *Helianthus tuberosus*. — Description of the new species in English].

TOCCALITI, A. È tossica per l'olivo la soluzione antidacica? *Il Giornale d'Italia Agricolo*, Roma, 1937, anno XX, n. 40, p. 5.
[Is the mixture of molasses and sodium arsenite employed in the control of *Dacus oleae* toxic for the olive tree?].

TRINCHIERI, G[iulio]. Un nemico alle porte: la dorifora. *Sapere*, Roma, 1937, anno III, vol. VI, n. 69, pp. 302-305, 13 figg.
[*Leptinotarsa decemlineata* in the different countries].

TULLIS, E. C. Cercospora oryzae on rice in the United States. *Phytopathology*, Lancaster, Pa., 1937, Vol. 27, No. 10, pp. 1005-1008, fig. 1. Literature cited, p. 1008.

TVERSKOY, D. The effect of short and ultra-short radio waves on fungi and bacteria pathogenous to plants. *Plant Protection*, Leningrad, 1937, No. 13, pp. 3-28. [Literature], pp. 25-26.
[In Russian, with title and summary also in English. — *Bacillus carotovorus, Fusarium solani, Botrytis cinerea, Sclerotinia libertiana, Phytophthora infestans*].

VAN GINNEKEN, P. J. H., en DE HAAN, K. Enquête omtrent het voorkomen van de bietenvlieg en de schildpadtor in de jaren 1935, '36 en '37. *Mededeelingen van het Instituut voor Suikerbietenteelt*, Bergen op Zoom 1937, aflev. 6, blz. 103-118.
[In Dutch, with title and summary also in French: — 'Enquête sur la mouche de la betterave et la casside aux années 1935, '36 et '37'. — *Pegomyia hyoscyami* and *Cassida nobilis*].

VAYSSIÈRE, P[aul]. La conception scientifique actuelle de la lutte contre les sauterelles. *Revue Scientifique*, Paris, 1937, 75e année, nº 10, p. 364-369, fig. 1-3.

VERDOORN, Fr. (Edited by). Chronica Botanica. Leiden, Holland, 1937, Vol. III, 431 pp., 69 portraits, 49 figs.
[See also this *Bulletin*, 1937, No. 4, p. 83].

VIDAL, J. - L. A la recherche de nouvelles bouillies cupriques plus efficaces ou plus économiques. *Revue de Viticulture*, Paris, 1937, 44e année, tome LXXXVII, nº 2244, p. 14-16.

VINSON, Jean. Les larves des Coléoptères Lamellicornes de l'île Maurice. *La Revue Agricole de l'Ile Maurice*, Maurice, 1937, nº 92, p. 68-70, 1 pl. Bibliographie, p. 70.
[*Adoretus versutus, Aphodius lividus, Serica* sp., *Cetonia* sp., *Rhizotrogus pallens, Hybosorus illigeri, Phytalus smithi, Oryctes tarandus*].

VIVAS, Oscar. El piretro. El cultivo auxiliar de la chacra y quinta cordobesa. *Boletin de Agricultura y Ganadería*, Córdoba, 1937, año XIII, mayo-junio de 1937, págs. 19 a 24, 1 fig.
[*Chrysanthemum cinerariaefolium*].

WARDLAW, C. W. Banana diseases. XI. – Notes on some plantation diseases in Guadeloupe. *Tropical Agriculture*, Trinidad, B. W. I., 1937, Vol. XIV, No. 10, pp. 279-280. References, p. 280.
[*Fusarium oxysporum* var. *cubense, Bacterium solanacearum*, virus and heart-rot disease, *Cercospora musae, Cordana musae, Chloridium musae, Helminthosporium torolosum, Frankliniella insularis, Cosmopolites sordidus*]

WARTENBERG, Hans. Wünschelrute, Erdstrahlen und Pflanzenkrankheiten. *Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1937, 17. Jarhg., Nr. 11, S. 85-87.

NOTES

'Chronica Botanica'. — From February, 1938 *Chronica Botanica* will be issued bymonthly and no longer as a year-book, edited in 1935, 1936 and 1937 by Dr. Fr. Verdoorn [see this *Bulletin*, 1935, No. 7, pp. 169-170; 1937, No. 4, p. 83, and No. 12, p. 292]. The new periodical will continue to give all the essential information which was given in the old year-book and will include some new sections as well. The world list of plant science institutions and societies will appear as an annual supplement.

Prof. ALESSANDRO BRIZI, *Segretario generale dell'Istituto, Direttore responsabile.*

SOME PUBLICATIONS ISSUED BY THE INTERNATIONAL INSTITUTE OF AGRICULTURE

(A complete list of the publications will be sent on request).

Actes de la Conférence internationale pour l'organisation de la lutte contre les sauterelles. Rome, 28-31 octobre 1920 (1921, 171 pp., 8vo) . . . . . * 15 lire

The Loss to Agriculture caused by Factory Fumes. Lectures given at the International Institute of Agriculture by Professor H. CRISTIANI, Geneva, and Professor Dr. J. STOKLASA, Prague (1927, 26 pp., 3 figs., 25 pls., 8vo) . . . * 15 »

Actes de la Conférence internationale pour la protection des plantes. Rome, 10-16 avril 1929 (1929, 201, pp., 8vo) * 25 »

INTERNATIONAL YEARBOOK OF AGRICULTURAL STATISTICS 1935-36/1936-37

PRICE: * 90 lire (CLOTH-BOUND: * 100 lire).

THE WORLD AGRICULTURAL SITUATION IN 1935-36

Economic Commentary on the International Yearbook of Agricultural Statistics for 1935-36 and 1936-37

PRICE: * 25 lire.

ANNUAIRE INTERNATIONAL DE LÉGISLATION AGRICOLE, 1936

XXVI^ÈME ANNÉE

(French edition only).

PRICE: * 75 lire (CLOTH-BOUND: * 85 lire).

**** Not including an addition of 10 % for cost of postage and packing.***

(Continued on next page).

INTERNATIONAL REVIEW OF AGRICULTURE

Published monthly and incorporating:—

(1) **Monthly Bulletin of Agricultural Economics and Sociology;**

(2) **Monthly Crop Report and Agricultural Statistics;**

(3) **Monthly Bulletin of Agricultural Science and Practice;**

(4) **International Bulletin of Plant Protection.**

ANNUAL SUBSCRIPTION	* 125 lire
SEPARATE NUMBERS, EACH	** 14 »

* For Italy and Italian Colonies 100 lire.
** For Italy and Italian Colonies 10 lire.

Special subscription for each of the ***four reprints*** *of the INTERNATIONAL REVIEW OF AGRICULTURE:—*

(1) **Monthly Bulletin of Agricultural Economics and Sociology.**	ANNUAL SUBSCRIPTION	(a) 45 lire
	SEPARATE NUMBERS . .	(b) 5 »
(2) **Monthly Crop Report and Agricultural Statistics**	ANNUAL SUBSCRIPTION	(a) 45 »
	SEPARATE NUMBERS . .	(b) 5 »
(3) **Monthly Bulletin of Agricultural Science and Practice**	ANNUAL SUBSCRIPTION	(a) 45 »
	SEPARATE NUMBERS . .	(b) 5 »
(4) **International Bulletin of Plant Protection.**	ANNUAL SUBSCRIPTION	(a) 40 »
	SEPARATE NUMBERS . .	(c) 4 »

(a) For Italy and Italian Colonies 36 lire.
(b) For Italy and Italian Colonies 4 lire.
(c) For Italy and Italian Colonies 3.50 lire.

In the prices shown above the cost of postage is included.

All **subscriptions** and **remittances** for the publications of the Institute should be made direct to the

INTERNATIONAL INSTITUTE OF AGRICULTURE

Villa Umberto I. ROME (110), Italy.